

Claims:

1. A method for reducing the antigenicity of a therapeutic agent selected from the group consisting of peptide, polypeptide and protein comprising the steps of
5 forming a complex of the therapeutic agent with a serine containing phospholipid in the presence of sodium and calcium salts, wherein the antigenicity of the therapeutic agent is reduced when complexed with the serine containing phospholipid.
2. The method of claim 1, wherein the complex improves the stability of the
10 therapeutic agent.
3. The method of claim 1, wherein the complex runs at the interface of 10% and 14% dextran gradient.
- 15 4. The method of claim 1, wherein the complex is selected from the group consisting of liposomes, micelles, cochleates and non-bilayer structures.
5. The method of claim 1, wherein the phospholipid is phosphatidyl serine.
- 20 6. The method of claim 5, wherein the phospholipid further comprises phosphatidyl choline or phosphatidyl ethanolamine.
7. The method of claim 6, wherein the ratio of phosphatidyl choline to phosphatidyl serine is 7:3.
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8. The method of claim 1, wherein the sodium salt is about 100 mM NaCl and the calcium salt is about 5 mM CaCl₂.
9. The method of claim 1, wherein the therapeutic agent is Factor VIII.
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10. A method for reducing the immunogenicity of a therapeutic agent selected from the group consisting of peptide, polypeptide and protein comprising the steps

of forming a complex of the therapeutic agent with a serine containing phospholipid in the presence of sodium and calcium salts, wherein the immunogenicity of the therapeutic agent upon administration to an individual is reduced when complexed with the serine containing phospholipid.

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11. The method of claim 10, wherein the complex runs at the interface of 10% and 14% dextran gradient.

12. The method of claim 10, wherein the complex is selected from the group
10 consisting of liposomes, micelles, cochleates and non-bilayer structures.

13. The method of claim 10, wherein the phospholipid is phosphatidyl serine.

14. The method of claim 13, wherein the phospholipid further comprises
15 phosphatidyl choline or phosphatidyl ethanolamine.

15. The method of claim 14, wherein the ratio of phosphatidyl choline to phosphatidyl serine is 7:3.

20 16. The method of claim 10, wherein the sodium salt is about 100 mM NaCl and the calcium salt is about 5 mM CaCl₂.

17. The method of claim 10, wherein the therapeutic agent is Factor VIII.

25 18. Lipid-protein complexes which are formed by incubating a protein with a serine containing phospholipid in the presence of about 100 nM of a sodium salt and about 5 nM of a calcium salt and characterized in that the complexes migrate at the interface of 10% and 14% dextran gradient.

30 19. The lipid-protein complexes of claim 18 wherein the serine containing phospholipid is phosphatidyl serine.

20. The lipid-protein complexes of claim 19 further comprising phosphatidyl choline and wherein the ratio of phosphatidyl choline to phosphatidyl serine is 7:1.

21. The lipid-protein complex of claim 20 wherein the protein is Factor VIII.

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